

DOCKET NO. D-1965-076 CP-11

DELAWARE RIVER BASIN COMMISSION

**Forest Park Water (North Penn and North Wales Water Authorities)
Water Filtration Plant Discharge
Chalfont Borough, Bucks County, Pennsylvania**

PROCEEDINGS

This docket is issued in response to an application submitted to the Delaware River Basin Commission (DRBC or Commission) by Forest Park Water on September 19, 2012 (Application), for renewal an existing water filtration plant (WFP) and its related filter backwash discharge. National Pollutant Discharge Elimination System (NPDES) Permit No. PA0056804 for this project was issued by the Pennsylvania Department of Environmental Protection (PADEP) on February 19, 2009, effective March 1, 2009. PADEP issued Amendment 1 on April 12, 2011, effective on May 1, 2011. The docket also amends the service area of Forest Park Water Treatment Plant (FPWTP) from that described in Docket No. D-1965-076 CP-8, approved on February 18, 1981, to include the subsidiary water allocation of Bucks County Water and Sewer Authority (BCWSA) service area, which was contained in the application submitted to the Commission dated November 1, 2012.

The Application was reviewed for continuation of the project in the Comprehensive Plan and approval under Section 3.8 of the *Delaware River Basin Compact*. The Bucks County Planning Commission has been notified of pending action. A public hearing on this project was held by the DRBC on December 5, 2012.

A. DESCRIPTION

1. Purpose. The purpose of this docket is to renew the approval of an existing discharge of up to 2.0 million gallons per day (mgd) of filter backwash from the Forest Park Water Treatment Plant to Pine Run, a tributary to the Neshaminy Creek. No modification or expansion of the treatment facility is proposed. No expansion of the Point Pleasant Pumping Station is proposed. The purpose of this docket is also to amend the service area of FPWTP to include subsidiary allocation area of Lower Bucks County and Lower Moreland Township in Montgomery County as described in the application submitted to the Commission by FPWTP on November 1, 2012. No increase in water withdrawal allocation has been requested or included in this docket.

2. Location. The FPWTP will continue to discharge treated effluent to Pine Run through outfall No. 1 located at River Mile 115.63 – 40.0 – 0.1 (Delaware River – Neshaminy Creek – Pine Run) and Outfall No. 2 at River Mile 115.63 – 40.0 – 0.2 (Delaware River – Neshaminy Creek – Pine Run) in Chalfont Borough, Bucks County, Pennsylvania as follows:

OUTFALL NO.	LATITUDE (N)	LONGITUDE (W)
001 (from wastewater lagoon)	40° 17' 25"	75° 12' 13"
002 (from equalization basin)	40° 17' 28"	75° 12' 10"

3. Area Served. The FPWTP provides water to the docket holder's public supply distribution service area which currently includes subsidiary allocation area of central Bucks and Montgomery Counties, Pennsylvania. A service area map was included with the Application. The area served is being amended to include a portion of lower Bucks County and Lower Moreland Township in Montgomery County as described in the application submitted to the Commission on November 1, 2012.

For the purpose of defining the Area Served, sections B (Type of Discharge) and D (Service Area) of the docket holder's Application are incorporated herein by reference, to the extent consistent with all other conditions contained in the DECISION Section of this docket.

4. Physical features.

a. Design criteria. The FPWTP existing process wastewater treatment facilities provide influent equalization, clarification and sludge processing. Process wastewater from the treatment plant includes filter backwash, granular activated carbon contactor backwash and rinse, basin drain flow, and related overflow. The process wastewater is routed to the equalization basins and/or lagoon, then the treated effluent is then discharged to Pine Run just upstream from its confluence with the North Branch Neshaminy Creek. Sludge from the clarifiers will be pumped to the existing sludge thickener. No change in the PADEP-approved discharge quality or quantity (2 mgd) is proposed.

b. Facilities. The existing treatment facilities include two chemically-assisted clarifiers that include floating plate settlers and sludge removal equipment, a wastewater transfer pumping station, a sludge thickener, three centrifuges, two package plate settler units and a lagoon.

The project facilities are above the 100-year flood zone.

Wasted sludge is farmland applied in Bucks County as a PADEP designated top soil blending agent.

c. Water withdrawals. The potable water supply in the project service area is supplied by the North Penn and North Wales Water Authorities.

d. NPDES Permit / DRBC Docket. The NPDES Permit No. PA0056804 issued by PADEP on February 19, 2009, effective on March 1, 2009, and Amended on April 12, 2011, effective on May 1, 2011, includes final effluent limitations for the project discharge of 2 mgd to surface waters classified by the PADEP as Trout Stocking Fishery and Migratory Fishery (TSF/MF). The following average monthly effluent limits are among those listed in the NPDES permit and meet or are more stringent than the effluent requirements of the DRBC.

EFFLUENT TABLE A-1: DRBC Parameters Included in NPDES Permit

OUTFALLS 001 AND 002		
PARAMETER	LIMIT	MONITORING
pH (Standard Units)	6 to 9 at all times*	As required by NPDES permit
Total Suspended Solids	30 mg/l (85% minimum removal*)	As required by NPDES permit

* DRBC Requirement

EFFLUENT TABLE A-2: DRBC Parameters Not Included in NPDES Permit

OUTFALLS 001 AND 002		
PARAMETER	LIMIT	MONITORING
Total Dissolved Solids*	1,000 mg/l*	One Per Quarter**

* DRBC Requirement

** See DECISION Condition II.o.

e. Relationship to the Comprehensive Plan. The Neshaminy Creek Watershed Project was included in the Comprehensive Plan on October 26, 1966 by Docket No. D-65-76 CP and was supplemented as described below. This docket was supplemented by Docket No. D-65-76 CP (2), approved on January 25, 1967, which addresses the potable water supply project aspects of the Neshaminy Creek Watershed Work Plan in more detail, includes reference to the multi-purpose reservoir (PA-617) that was to be constructed on the North Branch Neshaminy Creek, which could utilize water diverted from the Delaware River. This docket was amended by Docket No. D-65-76 (3) on March 17, 1971 to designate an additional diversion source on Delaware River (a proposed intake at Yardley, PA) and other uses of diversion water (proposed nuclear power station at Limerick, PA), as well as the approval for supplemental water diversion to North Branch Neshaminy Creek for water supply purposes. An application by the Bucks County Commissioners to construct a dam on Pine Run, upstream from the Forest Park Water WFP emergency Pine Run intake, was approved by Docket No. D-65-76 (4) on April 25, 1973, but the project was designated as a flood control dam (PA-616). Supplements (5) through (7) of Docket No. D-65-76 CP were subsequently approved by the DRBC, but were related to flood control dams in other areas of the Neshaminy Basin.

The Forest Park Water WFP was added to the Comprehensive Plan on January 29, 1971 as described in DRBC Docket No. D-70-242 CP. The project proposed the construction of a water filtration plant with an initial capacity of 20 mgd, expandable to an ultimate capacity of 120 mgd for serving the water supply needs of the central Bucks and central Montgomery Counties, Pennsylvania. However, a plant of this capacity was never constructed.

Docket No. D-65-76 CP (8) was approved by the DRBC on February 18, 1981. The docket described, in extensive detail, revisions to the Neshaminy Watershed Plan and approved the surface water withdrawals and related facilities for the Forest Park Water WFP. The modifications proposed in the docket did not alter the main purpose of the project that was previously included in the Comprehensive Plan. One significant change was the decrease in the quantity of water needed to meet projected demands in the service area during the life of the project. The docket described that the FPWTP would be designed for an initial capacity of 20 mgd with a planned future expansion to 40 mgd by the year 2010, which is a reduction in plant's original size as proposed in Docket No. D-70-242. The docket also included allocations of water allowed to be withdrawn from the Delaware River Point Pleasant Pumping Station (maximum of 48.8 mgd for use by the NWRA (now owned by Forest Park Water) and up to 46.2 mgd for use by PECO (now owned by Exelon). Additionally, the docket required the docket holder to maintain a minimum flow of 5.3 mgd from March 1 to June 15, and a minimum of 2.73 mgd the remainder of the year, in North Branch Neshaminy Creek, as measured at the Forest Park intakes. After accounting for augmentation and evaporative and seepage losses, up to 39.5 mgd of the water withdrawn from the Delaware River for water supply purposes would be available for use at the Forest Park Water WFP.

On August 12, 1988, DRBC determined that an interim plant proposed for Docket No. D-88-33 CP would have a non-substantial effect upon the water resources of the basin. The interim plant and later the existing Forest Park Water WFP and related facilities were constructed by the docket holder. An inflatable rubber dam was constructed at the North Branch Neshaminy Creek intake, rather than the originally planned concrete structure. A pre-Compact, low head dam that once served the Forest Park amusement park, now serves the emergency intake on Pine Run.

Docket No. D-65-76 CP-9 approved on March 16, 2005, approved modifications that improved treatment and discharge of process wastewater from the Forest Park Water WFP that was expanded from a capacity of 30 mgd to 40 mgd chiefly through the installation of a new membrane filtration system. The docket also contained condition ii.l. that stated:

“The docket holder shall restrict usage of North Branch Neshaminy Creek withdrawal to a total of 40 mgd, which shall be comprised of a maximum of 39.5 mgd of Point Pleasant diversion water plus 0.5 mgd of natural drainage on North Branch Neshaminy Creek or Pine Run, on an emergency basis, during low streamflow conditions.”

Docket No. D-65-76 CP-10, approved on September 26, 2007, renewed the approval of the discharge of up to 2 mgd of treated effluent from the Forest Park Water WFP.

BCWSA Docket No. D-2012-021 CP-1 scheduled for action by the Commission at the December 5, 2012, to approve a subsidiary water allocation for BCWSA of up to 10.0 million gallons per day of potable water through a new interconnection with North Wales Water Authority (NWWA). FPWTP has applied to have its service area amended to include the subsidiary allocation which was described in the application dated November 1, 2012. This docket amends the service area included in D-65-76 CP (8) to include the subsidiary allocation

area of Lower Bucks County and Lower Moreland Township in Montgomery County. No increase in water withdrawal allocation has been requested or included in this docket.

B. FINDINGS

The limits in the NPDES Permit are in compliance with Commission effluent quality requirements, where applicable.

The project is designed to produce a discharge meeting the effluent requirements as set forth in the *Water Quality Regulations* of the DRBC.

At the project site, Pine Run has an estimated seven-day low flow with a recurrence interval of ten years of 0.22 mgd (0.34 cfs). The ratio of this low flow to the maximum design wastewater discharge of 2 mgd is 0.11 to 1, but the discharge helps to maintain adequate perennial flow in the stream. The docket holder does have the capability of recycling the treated process wastewater (lagoon supernatant) to the raw water pumping station at the FPWTP.

The nearest surface water intake of record for public water supply downstream of the project discharge is located on Neshaminy Creek at River Mile 115.63 - 8.7, approximately 31 River Miles distant, and is owned by Aqua Pennsylvania (Aqua PA). The water filtration plant and intake was included in the Comprehensive Plan by Resolution R-62-4, adopted on March 28, 1962 and was issued Certificate of Entitlement No. 130, on July 15, 1976.

The North Wales Water Authority and North Penn Water Authority have entered into a Water Purchase Agreement (Agreement) with the BCSWA, dated December 21, 2010, in which NWWA and NPWA agree to each make 5.0 mgd of capacity available to the BCWSA on an annual basis for a total of 10.0 mgd. Commission approval of the subsidiary allocation and the amendment to the service area for the FPWTP is restricted to the 10 mgd being contracted and does not approve or commit the Commission to approve any potential future need to expand the treatment capacity of the FPWTP or the Point Pleasant Pumping Station water withdrawal allocation from the Delaware River (D-1965-076 CP-8). Commission judgment on any such projects will be made only after the referenced docket holders of such projects conclude that such expansions are necessary, submit an application(s) and supporting materials, and the Commission reviews the applications and completes its public process. (See DECISION Condition II.f.

The project does not conflict with the Comprehensive Plan and is designed to prevent substantial adverse impact on the water resources related environment, while sustaining the current and future water uses and development of the water resources of the Basin.

C. DECISION

- I. Effective on the approval date for Docket No. D-65-76 CP-11 below:

a. The projects described in Docket No. D-65-76 and supplements 2 through 10 are amended in the Comprehensive Plan to the extent that they are not included in Docket No. D-65-76 CP-11; and

b. Docket No. D-65-76 CP-10 is terminated and replaced by Docket No. D-65-76 CP-11.

c. The project and the appurtenant facilities described in the Section A “Physical Features” of this docket shall be added to the Comprehensive Plan.

II. The project and appurtenant facilities as described in the Section A “Physical features” of this docket are approved pursuant to Section 3.8 of the *Compact*, subject to the following conditions:

a. Docket approval is subject to all conditions, requirements, and limitations imposed by the PADEP in its NPDES Permit, and such conditions, requirements, and limitations are incorporated herein, unless they are less stringent than the Commission’s.

b. The facility and operational records shall be available at all times for inspection by the DRBC.

c. The facility shall be operated at all times to comply with the requirements of the Commission’s *WQR*.

d. The docket holder shall comply with the requirements contained in the Effluent Tables in Section A.4.d. of this docket. The docket holder shall submit the required monitoring results directly to the DRBC Project Review Section. The monitoring results shall be submitted annually, absent any observed limit violations, by January 31. If a DRBC effluent limit is violated, the docket holder shall submit the result(s) to the DRBC within 30 days of the violation(s) and provide a written explanation that states the action(s) the docket holder has taken to correct the violation(s) and protect against any future violations.

e. Amends the service area in Docket No. D-1965-076 CP-8 to include portions of Lower Bucks County and Lower Moreland Township in Montgomery County as described in the application submitted by FPWTP, dated November 1, 2012. No increase in water withdrawal allocation has been requested or included in this docket.

f. Within three years of docket approval, the docket holder shall submit a study of its current and projected ten year water demands and shall file a progress report thereon with the Commission and PADEP. This report will discuss whether the FPWTP will need additional capacity and how such capacity is planned to be obtained, including any potential request of FPWTF to move forward with an expansion of the water treatment plant and/or increase withdrawal from the Pt. Pleasant Pump Station water withdrawal. No design of any requested expansion at the FPWTF or the Pt. Pleasant Pumping Station shall be initiated without Commission approval.

g. Except as otherwise authorized by this docket, if the docket holder seeks relief from any limitation based upon a DRBC water quality standard or minimum treatment requirement, the docket holder shall apply for approval from the Executive Director or for a docket revision in accordance with Section 3.8 of the *Compact* and the *Rules of Practice and Procedure*.

h. Nothing herein shall be construed to exempt the docket holder from obtaining all necessary permits and/or approvals from other State, Federal or local government agencies having jurisdiction over this project.

i. The discharge of wastewater shall not increase the ambient temperatures of the receiving waters by more than 5°F, nor shall such discharge result in stream temperatures exceeding 87°F.

j. The docket holder is permitted to treat and discharge wastewaters as set forth in the Area Served Section of this docket, which incorporates by reference Sections B (Type of Discharge) and D (Service Area) of the docket holder's Application to the extent consistent with all other conditions of this DECISION Section.

k. The docket holder shall make wastewater discharge in such a manner as to avoid injury or damage to fish or wildlife and shall avoid any injury to public or private property.

l. Nothing in this docket approval shall be construed as limiting the authority of DRBC to adopt and apply charges or other fees to this discharge or project.

m. The issuance of this docket approval shall not create any private or proprietary rights in the waters of the Basin, and the Commission reserves the right to amend, suspend or rescind the docket for cause, in order to ensure proper control, use and management of the water resources of the Basin.

n. Unless an extension is requested and approved by the Commission in advance, in accordance with paragraph 11 of the Commission's Project Review Fee schedule (Resolution No. 2009-2), the docket holder is responsible for timely submittal of a docket renewal application on the appropriate DRBC application form at least 12 months in advance of the docket expiration date set forth below. The docket holder will be subject to late charges in the event of untimely submittal of its renewal application, whether or not DRBC issues a reminder notice in advance of the deadline or the docket holder receives such notice. In the event that a timely and complete application for renewal has been submitted and the DRBC is unable, through no fault of the docket holder, to reissue the docket before the expiration date below (or the later date established by an extension that has been timely requested and approved), the terms and conditions of the current docket will remain fully effective and enforceable against the docket holder pending the grant or denial of the application for docket approval.

o. The Executive Director may modify or suspend this approval or any condition thereof, or require mitigating measures pending additional review, if in the Executive

Director's judgment such modification or suspension is required to protect the water resources of the Basin.

p. Any person who objects to a docket decision by the Commission may request a hearing in accordance with Article 6 of the Rules of Practice and Procedure. In accordance with Section 15.1(p) of the Delaware River Basin Compact, cases and controversies arising under the Compact are reviewable in the United States district courts.

q. The docket holder may request of the Executive Director in writing the substitution of specific conductance for TDS. The request should include information that supports the effluent specific correlation between TDS and specific conductance. Upon review, the Executive Director may modify the docket to allow the substitution of specific conductance for TDS monitoring.

BY THE COMMISSION

DATE APPROVED: December 5, 2012

EXPIRATION DATE: February 28, 2019